BRUHATH BANGALORE MAHANAGARA PALIKE
EXECUTIVE ENGINEER, YELAHANKA DIVISION

me of Work: Construction of Additional Class Rooms at Govt Primary School at Kenchenahalli Colony in Ward No-01.

DETAILED ESTIMATE

Estimated,Cost: 50.00 Lakhs

No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	GROUND FLOOR								
1	Earth work excavation by manual means for drains,canals, waste weir draft, approach channels, key trench, foundation of Bridges and such similar works, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, excavated surface leveled and sides neatly dressed disposing off or leveling the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work. In ordinary/soft rock without blasting upto 1.5 m depth (KPWD SR 2023-24, Volume-I, Item No.1.5.1, Page No.6)								
		Cum							
	For Column Footing								
	C1F1		2	2.00	3.00	1.80	21.60		
	C2F2		3	2.00	2.50	1.80	27.00		
	C3F3		2	2.00	1.40	1.80	10.08		
	CF1		2	2.00	4.00	1.80	28.80		
	CF2		3	2.00	3.70	1.80	39.96		
	For SSM Foundation								
			2	19.80	0.90	0.90	32.08		
			2	4.60	0.90	0.90	7.45		
			4	4.60	0.75	0.75	10.35		
			1	19.80	0.45	0.30	2.67		
			7	1.80	0.45	0.30	1.70		
						Total Quantity	181.69	328.90	59758.50
	Rate Analysis								
	Basic rate in Rs.	299.00							
	Area Weitage @10%	29.90							
	Total Amount in Rs.	328.90							
2	Providing and injecting chemical emulsion for Pre-constructional Anti-Termite Treatment, creating continuous chemical barrier under and around the column pits, walls, trenches, basement excavation, top surface of the plinth filling, junction of wall and floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surrounding of pipes and conduits with Chlorpyriphos 20% E.C. / Lindane 20% E.C. @ 3.19 l/m2 including cost of chemical, diluting in water to one percent concentration, labour, usage charges of machinery, complete as per specifications. (KPWD SR 2023-24, V-2, Item No.4.1, Page No.5)								
		Sqm							
	For Column Footing								
	C1F1		2	2.00	3.00		12.00		
	C2F2		3	2.00	2.50		15.00		
	C3F3		2	2.00	1.40		5.60		
	CF1		2	2.00	4.00		16.00		
	CF2		3	2.00	3.70		22.20		
	For SSM Foundation								
			2	19.80	0.90		35.64		

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
			2	4.60	0.90		8.28		
			4	4.60	0.75		13.80		
			1	19.80	0.45		8.91		
			7	1.80	0.45		5.67		
						Total Quantity	143.10	129.80	18574.38
	Rate Analysis								
	Basic rate in Rs.	118.00							
	Area Weitage @10%	11.80							
	Total Amount in Rs.	129.80							
3	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size & with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift complete as per specifications. (KPWD SR 2023-24, V-I, Item No.1.23, Page No.11)								
		Cum							
	For Column Footing								
	C1F1		2	2.00	3.00	0.30	3.60		
	C2F2		3	2.00	2.50	0.30	4.50		
	C3F3		2	2.00	1.40	0.30	1.68		
	CF1		2	2.00	4.00	0.30	4.80		
	CF2		3	2.00	3.70	0.30	6.66		
	For SSM Foundation								
			2	19.80	0.90	0.15	5.35		
			2	4.60	0.90	0.15	1.24		
			4	4.60	0.75	0.15	2.07		
			1	19.80	0.45	0.15	1.34		
			7	1.80	0.45	0.15	0.85		
						Total Quantity	32.09	2950.20	94657.17
	Rate Analysis								
	Basic rate in Rs.	2682.00							
	Area Weitage @10%	268.20							
	Total Amount in Rs.	2950.20							
4	Providing and laying in position plain cement concrete Mix 1:3:6 Using 40 mm nominal size graded crushed coarse aggregates for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (KPWD SR 2023-24, V-I, Item No.2.1.3, Page No.15)								
		Cum							
	For Column Footing								
	C1F1		2	2.00	3.00	0.15	1.80		
	C2F2		3	2.00	2.50	0.15	2.25		
	C3F3		2	2.00	1.40	0.15	0.84		
	CF1		2	2.00	4.00	0.15	2.40		
	CF2		3	2.00	3.70	0.15	3.33		
	For SSM Foundation								
			2	19.80	0.90	0.15	5.35		
			2	4.60	0.90	0.15	1.24		
			4	4.60	0.75	0.15	2.07		

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
			1	19.80	0.45	0.15	1.34		
			7	1.80	0.45	0.15	0.85		
	For Flooring								
	Class Room-1		1	6.83	4.40	0.15	4.51		
	Class Room-2		1	6.83	4.40	0.15	4.51		
	Gents Toilet	WC	1	1.50	1.50	0.075	0.17		
			1	1.50	2.80	0.075	0.32		
	Ladies Toilet	WC	1	1.50	1.50	0.075	0.17		
			1	1.50	1.76	0.075	0.20		
	Stair Case Room		1	4.80	2.40	0.075	0.86		
	Coridoor		1	20.00	1.80	0.075	2.70		
			1	1.50	1.09	0.075	0.12		
						Total Quantity	35.02	6587.90	230693.27
	Rate Analysis								
	Basic rate in Rs.	5989.00							
	Area Weitage @10%	598.90							
	Total Amount in Rs.	6587.90							
5	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand) (KPWD SR 2023-24, V-II, Item No.5.4, Page No.9)								
		Cum							
	For SSM Foundation	Step-1	2	19.80	0.75	0.40	11.88		
			2	4.60	0.75	0.40	2.76		
			4	4.60	0.60	0.40	4.42		
		Step-2	2	19.80	0.60	0.60	14.26		
			2	4.60	0.60	0.60	3.31		
			4	4.60	0.45	0.45	3.73		
		Step-3	2	19.80	0.45	0.60	10.69		
			2	4.60	0.45	0.60	2.48		
						Total Quantity	53.53	7027.90	376175.38
	Rate Analysis								
	Basic rate in Rs.	6389.00							
	Area Weitage @10%	638.90							
	Total Amount in Rs.	7027.90							
6	Providing and laying in position Cement Concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (KPWD SR 2023-24, V-I, Item No.2.2.3 Page No.15)								
		Cum							
	For Column Footing								
	C1F1		2	1.80	2.80	0.45	4.54		
	C2F2		3	1.80	2.30	0.45	5.59		
	C3F3		2	1.80	1.20	0.45	1.94		
	CF1		2	1.80	3.80	0.45	6.16		
	CF2		3	1.80	3.50	0.45	8.51		
						Total Quantity	26.73	7178.69	191886.33

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Rate Analysis								
	Basic rate in Rs.	6336.00							
	Form Work 3% for Footing	190.08							
	Area Weitage @10%	652.61							
	Total Amount in Rs.	7178.69							
7	Providing and laying in position Cement Concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (KPWD SR 2023-24, V-I, Item No.2.4.3 Page No.16)								
		Cum							
	For Column Pedestral.								
	C1		4	0.30	0.45	0.90	0.49		
	C2		6	0.20	0.45	0.90	0.49		
	C3		7	0.30	0.15	0.90	0.28		
						Total Quantity	1.26	11848.32	14875.57
	Rate Analysis								
	Basic rate in Rs.	6336.00							
	Form Work 70% for Column	4435.20							
	Area Weitage @10%	1077.12							
	Total Amount in Rs.	11848.32							
8	Providing and laying in Cement Concrete for all Basement & surface level works, return walls, retaining walls, sunken floors etc. The granite/trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (KPWD SR 2023-24, V-I, Item No.2.3.2 Page No.16)								
		Cum							
	For Plinth beam								
			2	19.80	0.20	0.45	3.56		
			2	6.40	0.20	0.45	1.15		
			4	6.40	0.20	0.45	2.30		
			1	19.80	0.20	0.30	1.19		
			1	3.00	0.15	0.30	0.14		
						Total Quantity	8.34	10692.00	89203.36
	Rate Analysis								
	Basic rate in Rs.	6480.00							
	Form Work 50% for Plinth Beam	3240.00							

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Area Weitage @10%	972.00							
	Total Amount in Rs.	10692.00							
9	Providing and laying in position Cement Concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (KPWD SR 2023-24, V-I, Item No.2.5.2 Page No.16)								
		Cum							
	Column Above Plinth								
	C1		4	0.30	0.45	2.55	1.38		
	C2		6	0.20	0.45	2.55	1.38		
	C3		7	0.15	0.30	2.70	0.85		
						Total Quantity	3.60	12796.41	46124.66
	Rate Analysis								
	Basic rate in Rs.	6843.00							
	Form Work 70% for Column	4790.10							
	Area Weitage @10%	1163.31							
	Total Amount in Rs.	**12796.41**							
10	Providing and laying in position Cement Concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (KPWD SR 2023-24, V-I, Item No.2.5.2 Page No.16)								
		Cum							
	Over all Lintel								
			2	19.80	0.20	0.15	1.19		
			2	4.60	0.20	0.15	0.28		
			3	4.60	0.15	0.15	0.31		
			1	4.60	0.10	0.15	0.07		
			1	3.00	0.10	0.15	0.05		
	Roof Beam								
			2	19.80	0.30	0.45	5.35		
			1	19.80	0.15	0.30	0.89		
			2	6.40	0.30	0.45	1.73		
			3	6.40	0.20	0.45	1.73		
			1	6.40	0.10	0.30	0.19		
			1	3.00	0.10	0.20	0.06		
						Total Quantity	11.83	12043.68	142518.89
	Rate Analysis								

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Basic rate in Rs.	6843.00							
	Form Work 60% for Lintel & Roof Beam	4105.80							
	Area Weitage @10%	1094.88							
	Total Amount in Rs.	**12043.68**							
11	Providing and laying in position Cement Concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (KPWD SR 2023-24, V-I, Item No.2.5.2 Page No.16)								
		Cum							
	Roof Slab								
			1	20.00	6.60	0.15	19.80		
	Deduction for Stair Case		-1	2.40	4.40	0.15	-1.58		
	Stair Case								
	Waist Slab-1		1	3.50	1.20	0.15	0.63		
	Waist Slab-2		1	3.50	1.20	0.15	0.63		
	Landing		1	2.40	0.90	0.15	0.32		
	Steps		24	1.20	0.075		2.16		
						Total Quantity	**21.96**	11290.95	247949.26
	Rate Analysis								
	Basic rate in Rs.	6843.00							
	Form Work 50% for Roof Slab & Stair Case	3421.50							
	Area Weitage @10%	1026.45							
	Total Amount in Rs.	**11290.95**							
12	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification. (KPWD SR 2023-24, V-I, Item No.2.11(a), Page No.18)								
		Tonne							
	For Footing @120Kgs/Cum			26.73		0.12	3.21		
	For Pedestral @120Kgs/Cum			1.26		0.12	0.15		
	For Column @180Kgs/Cum			3.60		0.18	0.65		
	For Plinth Beam @180Kgs/Cum			8.34		0.18	1.50		
	For Lintel @80Kgs/Cum			1.89		0.08	0.15		
	For Roof Beam @200Kgs/Cum			9.95		0.20	1.99		
	For Roof Slab @145Kgs/Cum			18.22		0.145	2.64		
	For Stair Case @120Kgs/Cum			3.74		0.12	0.45		
						Total Quantity	**10.74**	**98402.70**	**1056794.81**
	Rate Analysis								
	Basic Rate	89457.00							
	Area Weightage @10%	8945.70							
	Total Amount	**98402.70**							

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
13	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. (KPWD SR 2023-24, V-II, Item No.6.32, Page No.17)								
		Sqm							
	Outer Wall		2	19.80		2.55	100.98		
			2	4.60		2.55	23.46		
	Deductions								
	Doors, D		-2	1.00		2.10	-4.20		
	Doors, D1		-2	0.75		2.10	-3.15		
	Window, W		-6	1.50		1.20	-10.80		
	Ventilator, V		-2	0.75		0.60	-0.90		
						Total Quantity	105.39	1441.00	151866.99
	Rate Analysis								
	Basic Rate	1310.00							
	Area Weightage @10%	131.00							
	Total Amount	1441.00							
14	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. (KPWD SR 2023-24, V-II, Item No.6.33, Page No.17)								
		Sqm							
	Inside wall								
			3	4.80		2.55	36.72		
						Total Quantity	36.72	1354.10	49722.55
	Rate Analysis								
	Basic Rate	1231.00							
	Area Weightage @10%	123.10							
	Total Amount	1354.10							
15	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x100x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. (KPWD SR 2023-24, V-II, Item No.6.34, Page No.17)								
		Sqm							
	In Toilets								
			1	4.80		2.70	12.96		
			1	3.00		2.70	8.10		
	Deductions								
	Door, D2		-2	0.75		2.10	-3.15		
						Total Quantity	17.91	1214.40	21749.90
	Rate Analysis								
	Basic Rate	1104.00							
	Area Weightage @10%	110.40							
	Total Amount	1214.40							

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
16	Providing 20 mm cement plaster of mix :1:4 (1 cement: 4 fine sand) to brick/stone masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. (KPWD SR 2023-24, V-II, Item No.8.3.1, Page No.41)								
		Sqm							
	Outside Plastering								
			2	20.00		3.15	126.00		
			2	4.80		3.15	30.24		
	Column C3		7	1.20		3.15	26.46		
	Deductions								
	Doors, D		-2	1.00		2.10	-4.20		
	Doors, D1		-2	0.75		2.10	-3.15		
	Window, W		-6	1.50		1.20	-10.80		
	Ventilator, V		-2	0.75		0.60	-0.90		
						Total Quantity	**163.65**	**389.40**	**63725.31**
	Rate Analysis								
	Basic Rate	354.00							
	Area Weightage @10%	35.40							
	Total Amount	**389.40**							
17	Providing 15 mm cement plaster with cement mortar 1:3 (1 cement:3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. (KPWD SR 2023-24, V-II, Item No.8.7, Page No.42)								
		Sqm							
	Inside Plastering								
	Class Room-1		2	6.83		3.00	40.98		
			2	4.40		3.00	26.40		
	Class Room-2		2	6.83		3.00	40.98		
			2	4.40		3.00	26.40		
	Gents Toilet	WC	4	1.50		3.00	18.00		
			2	1.50		3.00	9.00		
			2	2.80		3.00	16.80		
	Ladies Toilet	WC	4	1.50		3.00	18.00		
			2	1.50		3.00	9.00		
			2	1.76		3.00	10.56		
	Deductions								
	Doors, D		-2	1.00		2.10	-4.20		
	Doors, D1		-2	0.75		2.10	-3.15		
	Door, D2	2	-2	0.75		2.10	-6.30		
	Window, W		-6	1.50		1.20	-10.80		
	Ventilator, V		-2	0.75		0.60	-0.90		
						Total Quantity	**190.77**	**402.60**	**76804.00**
	Rate Analysis								
	Basic Rate	366.00							
	Area Weightage @10%	36.60							
	Total Amount	**402.60**							
18	Providing 12 mm cement plaster with cement mortar 1:6 (1 cement:6 fine sand) including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. (KPWD SR 2023-24, V-II, Item No.8.1.2, Page No.41)								

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
		Sqm							
	For Ceiling								
	Class Room-1		1	6.83	4.40		30.05		
	Class Room-2		1	6.83	4.40		30.05		
	Gents Toilet	WC	1	1.50	1.50		2.25		
			1	1.50	2.80		4.20		
	Ladies Toilet	WC	1	1.50	1.50		2.25		
			1	1.50	1.76		2.64		
	Coridoor		1	20.00	1.80		36.00		
						Total Quantity	107.44	265.10	28483.40
	Rate Analysis								
	Basic Rate	241.00							
	Area Weightage @10%	24.10							
	Total Amount	265.10							
19	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete as per specifications and as per directions of Engineer in charge.. (KPWD SR 2023-24, V-II, Item No.8.51, Page No.50)								
		Sqm							
	Vide Qty from Item No.	16					163.65		
	Vide Qty from Item No.	17					190.77		
	Vide Qty from Item No.	18					107.44		
						Total Quantity	461.86	110.00	50805.04
	Rate Analysis								
	Basic Rate	100.00							
	Area Weightage @10%	10.00							
	Total Amount	110.00							
20	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :Water thinnable cement primer to give an even shade after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge. (KPWD SR 2023-24, V-II, Item No.8.27, Page No.45)								
		Sqm							
	Vide Qty from Item No.	16					163.65		
						Total Quantity	163.65	58.30	9540.80
	Rate Analysis								
	Basic Rate	53.00							
	Area Weightage @10%	5.30							
	Total Amount	58.30							
21	Finishing walls with textured exterior paint of required shade :New work (Two coats applied @ 3.28 L/10 m²) over and including priming coat of exterior primer applied @ 2.20kg/10 m² to give an even shade after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge. (KPWD SR 2023-24, V-II, Item No.8.29, Page No.45)								
		Sqm							

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Vide Qty from Item No.	16					163.65		
						Total Quantity	163.65	311.30	50944.25
	Rate Analysis								
	Basic Rate	283.00							
	Area Weightage @10%	28.30							
	Total Amount	311.30							
22	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications: Two coats applied on walls @ 1.25 L/10 m² over and including one coat of Special primer applied @ 0.75 L/10 m² with paint of approved quality to give an even shade, after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge. (The gloss should be 50% @ 60 degree angle with 10 years life) (KPWD SR 2023-24, V-II, Item No.8.33.1, Page No.46)								
		Sqm							
	Vide Qty from Item No.	17					190.77		
	Vide Qty from Item No.	18					107.44		
						Total Quantity	298.21	173.80	51829.59
	Rate Analysis								
	Basic Rate	158.00							
	Area Weightage @10%	15.80							
	Total Amount	173.80							
23	Providing and fixing 1st quality ceramic glazed floor tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement: 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per m2 including pointing in white cement mixed with pigment of matching shade complete. (KPWD SR 2023-24, V-II, Item No.9.10, Page No.60)								
		Sqm							
	For Flooring								
	Gents Toilet	WC	1	1.50	1.50		2.25		
			1	1.50	2.80		4.20		
	Ladies Toilet	WC	1	1.50	1.50		2.25		
			1	1.50	1.76		2.64		
	For Cladding								
	Gents Toilet	WC	4	1.50		2.10	12.60		
			2	1.50		2.10	6.30		
			2	2.80		2.10	11.76		
	Ladies Toilet	WC	4	1.50		2.10	12.60		
			2	1.50		2.10	6.30		
			2	1.76		2.10	7.39		
	Deductions								
	Door		-6	0.75		2.10	-9.45		
						Total Quantity	58.84	1216.60	71587.18
	Rate Analysis								
	Basic Rate	1106.00							
	Area Weightage @10%	110.60							
	Total Amount	1216.60							

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
24	Providing and laying flooring and steps fine machine polished granite stone slabs 20 mm thick on cement mortar bed 1:6, 20 mm thick, and joints finished with cement mortar 1:3 over existing cement concrete bed , including cost of materials, mortar, labour, curing complete as per specifications. (KPWD SR 2023-24, V-II, Item No.9.30, Page No.64)								
		Sqm							
	For Flooring								
	Class Room-1		1	6.83	4.40		30.05		
	Class Room-2		1	6.83	4.40		30.05		
	Stair Case Room		1	4.80	2.40		11.52		
	Coridoor		1	20.00	1.80		36.00		
			1	1.50	1.09		1.64		
	For Skirting								
	Class Room-1		2	11.23		0.10	2.25		
	Class Room-2		2	11.23		0.10	2.25		
	Stair Case Room		1	7.20		0.10	0.72		
	Coridoor		1	20.00		0.10	2.00		
						Total Quantity	116.47	5860.80	682613.24
	Rate Analysis								
	Basic Rate	5328.00							
	Area Weightage @10%	532.80							
	Total Amount	5860.80							
25	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to openings / wooden frames with rawl plugs screws etc. (KPWD SR 2023-24, V-II, Item No.11.34(B), Page No.86)								
		Kgs							
	Window, W		6	1.50		1.20	10.80		
	Ventilator, V		2	0.75		0.60	0.90		
							11.70	Sqm	
						45Kgs per Sqm	526.50	Kgs	
						Total Quantity	526.50	201.30	105984.45
	Rate Analysis								
	Basic Rate	183.00							
	Area Weightage @10%	18.30							
	Total Amount	201.30							
26	Providing & fixing of 3-track x 2-panel sliding windows made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having an overall size of 108mm width x 45mmheight with reinforcement of 1mm thickness and Sash with overall size of 39mm x 75mm with GI reinforcement of 2mm and mesh sash of size 37mm x 58mm. Coextruded Glazing bead for fixing of glass shall be of size 20mm x 24 mm. Windows shall be provided with 6mm plain float glass, standard hardware& Multi point locking system with touch lock. Wall thickness of frame & sash shall be of 2mm-2.5mm. Maximum possible size – 2419mm x 2200mm. (The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made) (KPWD SR 2023-24, V-II, Item No.12.90, Page No.110)								
		Sqm							
	Window, W		6	1.50		1.20	10.80		
						Total Quantity	10.80	7407.40	79999.92
	Rate Analysis								

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Basic Rate	6734.00							
	Area Weightage @10%	673.40							
	Total Amount	7407.40							
27	Providing & fixing of louvered ventilator made out of multi chambered UPVC (Matching to RAL-9016) sections and with minimum TiO2 (Titan um Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free with gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the ventilator frame. The frame having overall size of 39mm x 39mm with GI reinforcement of 1mm thickness. Louver clip in Aluminium (powder coated in white) will be used on the frame along with plastic parts for fixing the 4 mm pin head glass. Wall thickness of frame shall be 2mm.Maximum possible size - 1000mm x1000mm.(The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made) (KPWD SR 2023-24, V-II, Item No.12.85, Page No.109)								
		Sqm							
	Ventilator, V		2	0.75		0.60	0.90		
						Total Quantity	0.90	6290.90	5661.81
	Rate Analysis								
	Basic Rate	5719.00							
	Area Weightage @10%	571.90							
	Total Amount	6290.90							
28	Providing Honne wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications. (KPWD SR 2023-24, V-II, Item No.12.11, Page No.99)								
		Cum							
	Doors, D		2	6.20	0.10	0.10	0.12		
						Total Quantity	0.12	151881.40	18833.29
	Rate Analysis								
	Basic Rate	138074.00							
	Area Weightage @10%	13807.40							
	Total Amount	151881.40							
29	Providing and fixing in position fully panelled Honne wood shutters for doors with stiles and rails of 40mm. thick with bottom and lock rails 180mm wide top rail and stiles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, usage charges complete as per specifications. (excluding cost of fixtures) (KPWD SR 2023-24, V-II, Item No.12.15, Page No.100)								
		Sqm							
	Doors, D		2	1.00		2.10	4.20		
						Total Quantity	4.20	8188.40	34391.28
	Rate Analysis								
	Basic Rate	7444.00							
	Area Weightage @10%	744.40							
	Total Amount	8188.40							
30	Painting wood work with Deluxe Multi Surface Paint of required shade. Two coat applied @ 0.90L/10 m² over an under coat of primer applied @0.75 L./10 m² of approved brand and manufacture to give an even shade including preparing the surface after thorougly cleaning oil, grease, dirt and foreign matter, sand papering and knotting , cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge. (KPWD SR 2023-24, V-II, Item No.8.33.2, Page No.46)								

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
		Sqm							
	Doors, D		4	1.00					
						2.10	8.40		
						Total Quantity	8.40	151.80	1275.12
	Rate Analysis								
	Basic Rate	138.00							
	Area Weightage @10%	13.80							
	Total Amount	151.80							
	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two coat applied @ 0.90L/10 m² over an under coat of primer applied @ 0.80 L/10 m² of approved brand and manufacture including preparing the surface after thorougly cleaning oil, grease, dirt and foreign matter, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge. (KPWD SR 2023-24, V-II, Item No.8.33.3, Page No.47)								
		Sqm							
	Doors, D		4	1.00					
						2.10	8.40		
						Total Quantity	8.40	152.90	1284.36
	Rate Analysis								
	Basic Rate	139.00							
	Area Weightage @10%	13.90							
	Total Amount	152.90							
	Providing & fixing factory made PVC Door frame of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet metered cut at corners & jointed 2 No.s of 150mm long brackets of 15x15mm M.S Square tube, the entire door frame to be reinforced with 19x19mm M.S Square tube of 19 gauge. The door frame to be fixed to the wall using M.S. Screws of 65/80mm size complete as per manufacturers specification & direction of Engineer-in-charge. (KPWD SR 2023-24, V-II, Item No.12.54, Page No.104)								
		m							
	Door, D2		2	5.70			11.40		
						Total Quantity	11.40	349.80	3987.72
	Rate Analysis								
	Basic Rate	318.00							
	Area Weightage @10%	31.80							
	Total Amount	349.80							
	Providing & fixing 30mm thick factory made rigid foam Prelam Panelled Door Shutters made from M.S. tube of 19x19mm, 19 gauge for stiles and 15x15mm for top & bottom rails, covered with heat moulded Prelaminated PVC C Channel of 5mm thick sheet & 30x50mm wide to form stiles & 5mm thick & 75mm wide Prelaminated PVC Sheets for top rail, lock rail & bottom rail on either side & 5mm thick, 20mm wide cross PVC sheet as gap insert for top rail & bottom rail, Panelling of 5mm thick PVC sheet Prelaminated on either side fitted in the M.S. frame, Sealed to the stiles & rails with PVC Designer beading on either side & joined together with solvent cement adhesive etc., Complete as per manufacturers specification & direction of Engineer-in-charge fixed to frames with 3 nos of 75mm Aluminium hinges. do- with both side prelam (KPWD SR 2023-24, V-II, Item No.12.55.1, Page No.104)								
		Sqm							
	Door, D2		2	0.75		2.10	3.15		
						Total Quantity	3.15	2602.60	8198.19
	Rate Analysis								
	Basic Rate	2366.00							
	Area Weightage @10%	236.60							
	Total Amount	2602.60							

No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
34	Providing and fixing flush door shutter made out of solid core block board type, well seasoned , chemicaly treated hard wood battens and internal frame with minimum 45 mm wide wooden frame alround door shutters covered with cross bonded wooden sheets (core veneer) hot pressed and fastened on both sides of the door useing liquid phenol formaldehyde resin as per IS specifications 2202 (part-I) 1991. from manufacturer complete as per spcification. -do- 35 mm thick both side commercial (KPWD SR 2023-24, V-II, Item No.12.57.6, Page No.105)								
		Sqm							
	Doors, D1		2	0.75		2.10	3.15		
						Total Quantity	3.15	3654.20	11510.73
	Rate Analysis								
	Basic Rate	3322.00							
	Area Weightage @10%	332.20							
	Total Amount	3654.20							
35	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in- charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.) including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge. (KPWD SR 2023-24, V-II, Item No.11.28, Page No.85)								
		Kgs							
	Stair Case								
	Waist Slab-1		1	3.50		1.00	3.50		
	Waist Slab-2		1	3.50		1.00	3.50		
							7.00	Sqm	
						12Kgs per Sqm	84.00	Kgs	
						Total Quantity	84.00	621.50	52206.00
	Rate Analysis								
	Basic Rate	565.00							
	Area Weightage @10%	56.50							
	Total Amount	621.50							
	ELECTRIC WORK								
36	Supplying heavy gauge PVC conduit pipe..... dia confirming to IS 2509 with suitable size benda, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or rawl plugs in case of brick walls and cement plastering damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. (ELE SR 2023-24 Page-2, Item-1.1.2)								
		m							
	b) 25mm dia 2mm thick Concealed Conduit System		60				60.00		
						Total Qty	60.00	81.00	4860.00
37	Supplying..... mm dia 2mm/2.5mm thick heavy gauge PVC conduit pipe with suitable size bends, metal/PVC junction boxes adhesive paste etc., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be covered using PVC end enclosures. run with 18SWG GI fish wire wherever necessary. (ELE SR 2023-24 Page-2, Item-1.2.2)								
		m							
	b) 25mm dia 2mm thick								

No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
			60				60.00		
						Total Qty	60.00	78.00	4680.00
38	Groove cutting in the wall supplying.....dia 2mm/2.5mm thick heavy gauge PVC Conduit Pipe with bends, metal junction boxes adhesive paste etc., and bracing U or J hooks and cement plastering up to the surface of the brick level and run with 18 SWG GI fish wire run through out conduit wherever necessary. (ELE SR 2023-24 Page-2, Item-1.3.2)								
		m							
	b) 25mm dia 2mm thick								
			60				60.00		
						Total Qty	60.00	79.00	4740.00
39	Supplying and fixing sheet metal box made out of 18 SWG sheet metal with necessary holes for cable/conduit entry as required with one coat of approved make etc.(ELE SR 2023-24 Page-1, Item-1.4)								
		each							
	c) 135x75x65mm		15				15.00		
						Total Qty	15.00	139.00	2085.00
40	**d)180x90x65mm**		15				15.00		
						Total Qty	15.00	161.00	2415.00
41	**e)200x90x65mm**		15				15.00		
						Total Qty	15.00	179.00	2685.00
42	Supplying and fixing PVC/metal conduit accessories.(3/5) b)25mm junction box (ELE SR 2023-24 Page-3, Item-1.5)								
		each							
			10				10.00		
						Total Qty	10.00	56.00	560.00
43	**c) 32mm deep junction box**								
			10				10.00		
						Total Qty	10.00	61.00	610.00
44	Supplying and flush mounting teak wooden box without front plank, made of not less than 12mm thick wood, after due groove cutting, necessary masonry patch work cpmplete. a)12"x"12"x3" (330x300x76mm) (ELE SR 2023-24 Page-3, Item-1.6)								
		m							
			10				10.00		
						Total Qty	10.00	120.00	1200.00
45	**b)12"x9"x3" (300x228x76)**		10				10.00		
						Total Qty	10.00	115.00	1150.00
46	Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 2x1.5Sqmm (Phase & Neutral) & 1x1.0sqmm (Earthwire) FRLS multistrand copper PVC insulated multi strand copper wire with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet/gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. compelete for each outlet. Short point upto 3Mtr from tapping point to out let via switch (ELE SR 2023-24 Page-5, Item-2.1.1)								
		Point							
			5				5.00		
						Total Quantity	5.00	285.00	1425.00

Sl No	Description of Work	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
47	Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 2x1.5Sqmm (Phase & Neutral) & 1x1.0sqmm (Earthwire) FRLS multistrand copper PVC insulated multi strand copper wire with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet/gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. compelete for each outlet. b) Medium point above 3Mtr up to 6Mtr from tapping point to out let via switch (Each point) (ELE SR 2023-24 Page-5, Item-2.1.2)								
		Point							
			5				5.00		
						Total Quantity	5.00	394.00	1970.00
48	Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 2x1.5Sqmm (Phase & Neutral) & 1x1.0sqmm (Earthwire) FRLS multistrand copper PVC insulated multi strand copper wire copper PVC insulated multi strand 2x1.5Sqmm copper wire (confirming to IS-694:and latest amendments) without switch, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. a) Short point up to 3Mtr from tapping point to out let via switch box (ELE SR 2023-24 Page-5, Item-2.2.1)								
		Point							
			5				5.00		
						Total Quantity	5.00	269.00	1345.00
49	Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 2x1.5Sqmm (Phase & Neutral) & 1x1.0sqmm (Earthwire) FRLS multistrand copper PVC insulated multi strand copper wire copper PVC insulated multi strand 2x1.5Sqmm copper wire (confirming to IS-694:and latest amendments) without switch, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. b) Medium point above 3Mtr up to 6Mtr from tapping point to out let via switch box (ELE SR 2023-24 Page-5, Item-2.2.2)								
		Point							
			5				5.00		
						Total Quantity	5.00	379.00	1895.00
								Construction Total Amount	4233837.00
								Add 18% for GST Charges	762091.00
								Sub Total	4995928.00
								Miscellaneous and unforeseen charges etc.L.S	4072.00
								Grand Total Amount	50,00,000.00

Administrative Sanction for Rs. 50,00,000/- (Rupees Fifty Lakhs Only) is accorded under head

Registered as CE No. 52 Subject to conditions contained in enclosed No. BBMP/ELE/YNK-D/AS/52/23-24 Dt. 12/2/24

Executive Engineer

Certificate:

1. The work spot has been inspected and found to be necessary
2. The provisions made in the estimate are necessary and minimum
3. The estimate is based on CSR of PWD & ELE 2023-24

Assistant Engineer
Ward No.01
BBMP, Bangalore

Assistant Executive Engineer
Yelahanka Sub Division
BBMP, Bangalore

Executive Engineer
Yelahanka Division
BBMP, Bangalore